

In the Claims:

Please amend Claims 1, 2, 5, 6, 7, 9 and 10 to read as follows:

Sub B1 →
Sub D1 →
1. (Thrice Amended, Clean) A molded or cast article capable of withstanding high mechanical stress produced from a cellular polyurethane elastomer having a density within the range of from about 0.2 to about 1.1 g/cm³ which comprises the reaction product of:

- C →
- a) from about 65 to about 90 wt.%, based on the total weight of reaction product, of at least one higher molecular weight polyhydroxyl compound having an average molecular weight of from 500 to 6,000 and a functionality of at least 2;
 - b) from about 10 to about 25 wt.%, based on the total weight of reaction product, of at least one 2,3,5,6-tetramethyl-1,4-diisocyanatobenzene; and
 - c) from about 0.2 to about 10 wt.%, based on the total weight of reaction product, of water and/or at least one low molecular weight chain-lengthening and/or crosslinking agent having at least two hydroxyl groups and an average molecular weight of from 60 to 800.

Sub D2 →
C2 →
2. (Twice Amended, Clean) A process for producing the molded or cast article of Claim 1 in which the higher molecular weight polyhydroxyl compound a) is first reacted with the diisocyanate b) to produce an isocyanate-terminated prepolymer and the prepolymer is then reacted with the chain-lengthening and/or crosslinking agents and/or higher molecular weight polyhydroxyl compounds.

C3
5. (Once Amended, Clean) The molded or cast article of Claim 1 in which the cellular polyurethane elastomer is prepared in the presence of at least one catalyst selected from the group consisting of sodium salts and potassium salts of carboxylic acids in which the catalyst(s) is/are present in an amount in the range of from about 0.001 to about 3 wt.%, based on the total weight of reaction product.

ub 037
6. (Once Amended, Clean) A molded or cast article capable of withstanding high mechanical stress produced from a compact polyurethane elastomer having a density within the range of from about 1.0 to about 1.4 g/cm³ which comprises the reaction product of:

- C2
(under)
- a) from about 55 to about 90 wt.%, based on the total weight of reaction product, of at least one higher molecular weight polyhydroxyl compound having an average molecular weight of from 500 to 6,000 and a functionality of at least 2;
 - b) from about 10 to about 25 wt.%, based on the total weight of reaction product, of at least one 2,3,5,6-tetramethyl-1,4-diisocyanatobenzene; and
 - c) from about 1 to about 20 wt.%, based on the total weight of reaction product, of at least one low molecular weight chain-lengthening and/or crosslinking agent having at least two hydroxyl groups and an average molecular weight of from 60 to 800;

with the proviso that a), b) and c) are reacted in the absence of moisture and/or blowing agents which have a physical or chemical blowing action.

7. (Once Amended, Clean) A process for producing the molded or cast article of Claim 6 in which the higher molecular weight polyhydroxyl compound a) is first reacted with the diisocyanate b) to produce an isocyanate-terminated prepolymer and the prepolymer is then reacted with the chain-lengthening and/or crosslinking agents and/or higher molecular weight polyhydroxyl compounds.

005
9. (Once Amended, Clean) A molded or cast article capable of withstanding high mechanical stress produced from a filler-containing compact polyurethane elastomer having a density greater than 1.2 g/cm³ which comprises the reaction product of:

- 1.4
(under)
- a) from about 55 to about 90 wt.%, based on the total weight of reaction product, of at least one higher molecular weight polyhydroxyl compound having an average molecular weight of from 500 to 6,000 and a functionality of at least 2;

- sub D57
- 24
HLO
- b) from about 10 to about 25 wt.%, based on the total weight of reaction product, of at least one 2,3,5,6-tetramethyl-1,4-diisocyanatobenzene; and
 - c) from about 1 to about 20 wt.%, based on the total weight of reaction product, of at least one low molecular weight chain-lengthening and/or crosslinking agent having at least two hydroxyl groups and an average molecular weight of from 60 to 800;

with the proviso that a), b) and c) are reacted in the absence of moisture and/or blowing agents which have a physical or chemical blowing action.

10. (Once Amended, Clean) A process for producing the molded or cast article of Claim 9 in which the higher molecular weight polyhydroxyl compound a) is first reacted with the diisocyanate b) to produce an isocyanate-terminated prepolymer and the prepolymer is then reacted with the chain-lengthening and/or crosslinking agents and/or higher molecular weight polyhydroxyl compounds.

Please add new Claim 12 to the application to read as follows:

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--12. A molded or cast article capable of withstanding high mechanical stress produced from a cellular polyurethane elastomer having a density within the range of from about 0.2 to about 1.1 g/cm³ which comprises the reaction product of:

- a) from about 65 to about 90 wt.%, based on the total weight of reaction product, of at least one higher molecular weight polyhydroxyl compound having an average molecular weight of from 500 to 6,000 and a functionality of at least 2;
- b) from about 10 to about 25 wt.%, based on the total weight of reaction product, of at least one 2,3,5,6-tetramethyl-1,4-diisocyanatobenzene; and
- c) from about 0.2 to about 10 wt.%, based on the total weight of reaction product, of water and/or at least one low molecular weight chain-lengthening and/or crosslinking agent having at least two hydroxyl groups and an average molecular weight of from 60 to 800;

C5
wherein the higher molecular weight polyhydroxyl compound a) is reacted with the diisocyanate b) in the presence of a chain-lengthening and/or crosslinking agent c) to produce an isocyanate-terminated prepolymer. --
